PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SCB63535WO00	**FOR FURTHER ACTION**	See Form PCT/IPEA/416
International application No. PCT/GB2004/002893	International filing date *(day/month/year)* 06.07.2004	Priority date *(day/month/year)* 07.07.2003
International Patent Classification (IPC) or national classification and IPC A61M15/00, A61K9/00, A61K31/135, A61K31/485		
Applicant GW PHARMA LIMITED et al.		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
   a. ☒ *sent to the applicant and to the International Bureau)* a total of 3 sheets, as follows:
      ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
      ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒	Box No. I	Basis of the opinion
☐	Box No. II	Priority
☒	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☒	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
06.05.2005	09.09.2005
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Vänttinen, H Telephone No. +49 89 2399-7442

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/GB2004/002893

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

   ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
   - ☐ international search (under Rules 12.3 and 23.1(b))
   - ☐ publication of the international application (under Rule 12.4)
   - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-24 as originally filed

Claims, Numbers

1-22 received on 06.05.2005 with letter of 04.05.2005

Drawings, Sheets

1/7-7/7 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
   - ☐ the description, pages
   - ☐ the claims, Nos.
   - ☐ the drawings, sheets/figs
   - ☐ the sequence listing *(specify)*:
   - ☐ any table(s) related to sequence listing *(specify)*:

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
   - ☐ the description, pages
   - ☐ the claims, Nos.
   - ☐ the drawings, sheets/figs
   - ☐ the sequence listing *(specify)*:
   - ☐ any table(s) related to sequence listing *(specify)*:

* *If item 4 applies, some or all of these sheets may be marked "superseded."*

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/GB2004/002893

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 17-21

because:

☒ the said international application, or the said claims Nos. 18-21 relate to the following subject matter which does not require an international preliminary examination (specify):

see separate sheet

☒ the description, claims or drawings *(indicate particular elements below)* or said claims Nos. 17 are so unclear that no meaningful opinion could be formed *(specify)*:

see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 17-21

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form	☐	has not been furnished
	☐	does not comply with the standard
the computer readable form	☐	has not been furnished
	☐	does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.

☐ See separate sheet for further details

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/GB2004/002893

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation to restrict or pay additional fees, the applicant has:
   - ☒ restricted the claims.
   - ☐ paid additional fees.
   - ☐ paid additional fees under protest.
   - ☐ neither restricted nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
   - ☐ complied with.
   - ☐ not complied with for the following reasons:
4. Consequently, this report has been established in respect of the following parts of the international application:
   - ☒ all parts.
   - ☐ the parts relating to claims Nos. .

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-16,22
	No:	Claims	
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-16,22
Industrial applicability (IA)	Yes:	Claims	1-16,22
	No:	Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

1 Concerning Item III

1.1 It is unclear which technical features form the subject-matter of claim 17, because claims 9-12 relate to a dispenser and claim 17 refers to a formulation of said claims. Consequently and because said claim has not been searched, it cannot be examined in respect of Article 33(2)-(4) PCT.

1.2 Claims 18-21 fall under Rule 67.1(iv), because they concern a method for treatment of the human or animal body by therapy. Consequently and because said claims have not been searched, they cannot be examined in respect of Article 33(2)-(4) PCT.

2 Concerning Item V

2.1 WO-A-02/32487 (D2) discloses a dispenser according to claim 1 without a mention about a "drug of abuse" contained in the reservoir. EP-A-0 672 416 (D3), WO-A-03/037306 (D4) and US-A-3 980 766 (D5) disclose that opiates and especially diamorphine or methadone may be advantageously administered orally. In the light of the combined teachings of D2 and D3, D4 or D5, it would be obvious for the skilled person to arrive at the subject-matter of claims 1-8. Thus, the subject-matters of claims 1-8 do not meet the requirement of Article 33(3) PCT.

2.2 In addition, the technical features and method steps of claims 14-16 and 22 are considered to be obvious from the combination of D2 and D3, the technical features of claims 9 and 10 from the combination of D2 and D4, and the technical features of claims 11-13 appear to relate merely to one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed. Consequently, said claims do not meet the requirement of Article 33(3) PCT.

2.3 Furthermore, for the entrance into the regional phase the attention of the applicant is drawn to WO-A-03/070304 (D1) which appears to disclose the subject-matters of claims 1-3, 7, 14-16 and 22 and has a priority date which is prior to the priority date of the present application.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/GB2004/002893

2.4 The industrial applicability (Article 33(4) PCT) of a device according to the claims 16 and 22 appears to be self-evident.

3 Concerning Item VII

The closest prior art has not been identified as required by Rule 5(a)(ii) PCT. Furthermore, the independent claims are not in the two-part form as required by Rule 6.3(b) PCT. In addition, the claims do not include reference signs in parentheses as required by Rule 6.2(b) PCT.

CLAIMS

1. A dispenser comprising a reservoir containing a plurality of dosage units each of which comprise a formulation of a controlled drug or drug of abuse, said dosage units being contained in a tamper-evident manner such that access to the dosage units in use is controlled either by the dispenser or remotely and/or is monitored either by the dispenser or remotely.

2. The dispenser as claimed in claim 1, wherein the controlled drug or drug of abuse is a class A drug in a non-intravenous formulation, as defined by The Misuse of Drugs Act 1971.

3. The dispenser as claimed in claim 1 or 2, wherein the controlled drug or drug of abuse is an opioid.

4. The dispenser as claimed in any one of the preceding claims, wherein the opioid is methadone or a pharmaceutically acceptable salt or derivative thereof.

5. The dispenser as claimed in claim 4, wherein the opioid is methadone hydrochloride.

6. The dispenser as claimed in claim 4 or claim 5, wherein the formulation is for oral delivery.

7. The dispenser as claimed in any one of claims 1 to 3, wherein the opioid is diamorphine or a pharmaceutically acceptable salt or derivative thereof.

8. The dispenser as claimed in claim 7, wherein the opioid is diamorphine hydrochloride.

9. The dispenser as claimed in claim 7 or 8, wherein the formulation is dry and suitable for nasal delivery upon mixing with an aqueous solution.

10. The dispenser as claimed in claim 9, wherein the formulation further comprises a solubility enhancer.

11. The dispenser as claimed in claim 10, wherein the solubility enhancer is one or more of caffeine, sodium benzoate and sodium salicylate.

12. The dispenser as claimed in claim 10 or claim 11, wherein the solubility enhancer comprises caffeine and sodium benzoate and / or sodium salicylate.

13. The dispenser as claimed in any one of claims 9 to 12, wherein said formulation is a freeze-dried formulation.

14. The dispenser as claimed in any preceding claim, wherein more than 1 day's supply of dosage units are contained in the dispenser.

15. A reservoir as claimed in any one of claims 1 to 14, for use in the dispenser of claim 1.

16. A method of making a dispenser as defined in any one of claims 1 to 15, comprising introducing the plurality of dosage units into the reservoir and then sealing the reservoir in the dispenser so as to render the dispenser tamper-evident.

17. A formulation as defined in any one of claims 9 to 12.

18. A controlled method of taking a drug of abuse or a controlled drug comprising administering said drug of abuse or controlled drug from a dispenser as defined in any one of claims 1 to 14.

19. A method as claimed in claim 18, wherein said drug of abuse or controlled drug is present in a formulation as defined in any one of claims 9 to 12.

20. Use of a drug of abuse or a controlled drug in the manufacture of a medicament for use in a controlled method of taking a drug of abuse or controlled drug comprising administering said drug of abuse or controlled drug from a dispenser as defined in any one of claims 1 to 14.

21. Use as claimed in claim 20, wherein said drug of abuse or controlled drug is present in a formulation as defined in any one of 9 to 12.

22. A kit of parts comprising a dispenser as claimed in any one of claims 9 to 12; and aqueous liquid for introduction into the dispenser for rendering the formulation suitable for nasal administration.

633366; NLW; NLW